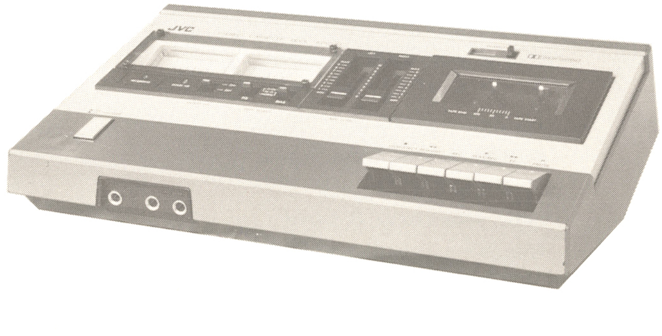
JVC

SERVICE MANUAL

MODEL
KD-720A/B/E/U
STEREO CASSETTE DECK



No. 4161
August 1977

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Specifications

Track system	4-track, 2-channel
Frequency response	Chrome*1 40–15,000 Hz Normal*2 40–14,000 Hz surpasses DIN 45 500
S/N ratio	56 dB (from peak level weighted.) The S/N is improved by 5 dB at 1 kHz and by 10 dB above 5 kHz with Dolby on. 60 dB with Dolby (DIN 45 500, weighted)
Wow and flutter	0.07% (WRMS) 0.2% (DIN 45 500)
Crosstalk	60 dB at 1 kHz
Channel separation	30 dB at 1 kHz
Harmonic distortion	1.5% at 1 kHz (reference output level) using normal tape
Bias & erase system	
BIAS	AC 95 kHz
ERASE	AC 95 kHz
Erasure	60 dB at 1 kHz
Heads	CRONIOS head for Rec/P.B. Double gap ferrite head for erase
Motor	DC electric governor motor
Tape speed	4.75 cm/sec (1-7/8 ips)
Speed accuracy	± 2%
Fast forward time	85 sec with C-60 cassette
Rewind time	85 sec with C-60 cassette
Semiconductors	IC; 2 pcs, Transistor; 14 pcs, Diode; 20 pcs, LED; 2 pcs.
Input jacks	Mic jack x 2 Max. sensitivity; 0.4 mV Matching impedance; 600 Ω – 10 kΩ Input jack x 2 Min. input level; 80 mV Input impedance; 470 kΩ
Output levels	Output jack x 2 Output level; 390 mV Output impedance; 4 kΩ Matching load impedance; 50 kΩ or more Headphone jack x 1 Output level; 0.3 mW Matching impedance; 8 Ω – 1 kΩ
DIN connector	Min. input level; 0.14 mV/kΩ Input impedance; 10 kΩ Output level; 390 mV Output impedance; 4 kΩ Matching impedance; 50 kΩ or more
Power requirement	AC 120 V, 220 V, 240 V, 50/60 Hz (KD-720A/B/E) AC 100 V, 120 V, 220 V, 240 V, 50/60 Hz (KD-720U)
Power consumption	15 W
Dimensions	Width; 390 mm Height; 128 mm Depth; 250 mm
Weight	3.6 kg (7.9 lbs)

*1 . . . . . TDK SA or Equivalent
*2 . . . . . MAXELL UD or Equivalent

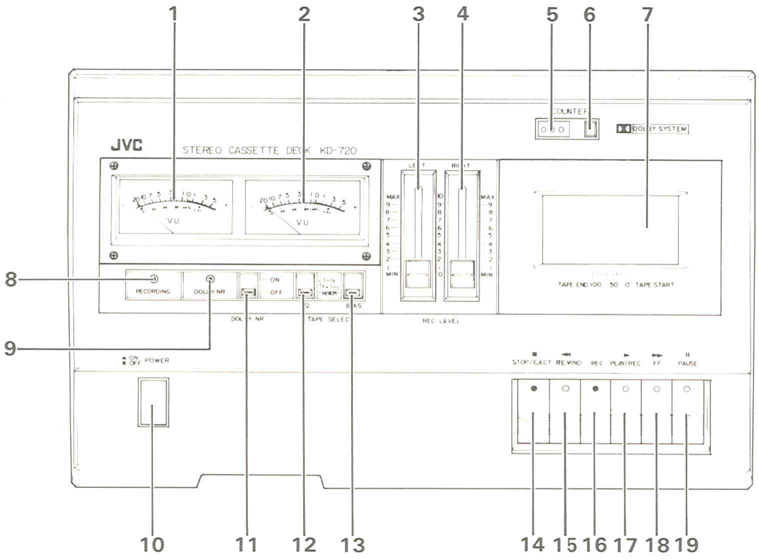
Design and specifications are subject to change without notice.

Features

- Dolby Noise Reduction System
- Chrome/Normal Tape Select Switches
- Slide Level Controls
- Cronios Head for Recording/Playback
- Full Auto Stop
- Electric Governor Motor
- Precision Machined Capstan

Controls and Connections

Top view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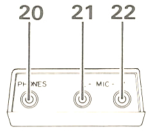
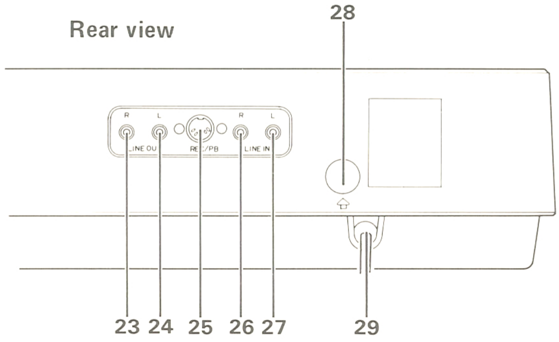
JVC
STEREO CASSETTE DECK KD-720
COUNTER
DOLBY SYSTEM
VU
VU
LEFT
RIGHT
MAX
MIN
REC LEVEL
RECORDING
DOLBY NR
ON
OFF
DOLBY NR
EQ
TAPE SELECT
NORM
BIAS
TAPE END 100 50 0 TAPE START
ON
OFF POWER
STOP/EJECT
REWIND
REC
PLAY/REC
FF
PAUSE

Front view

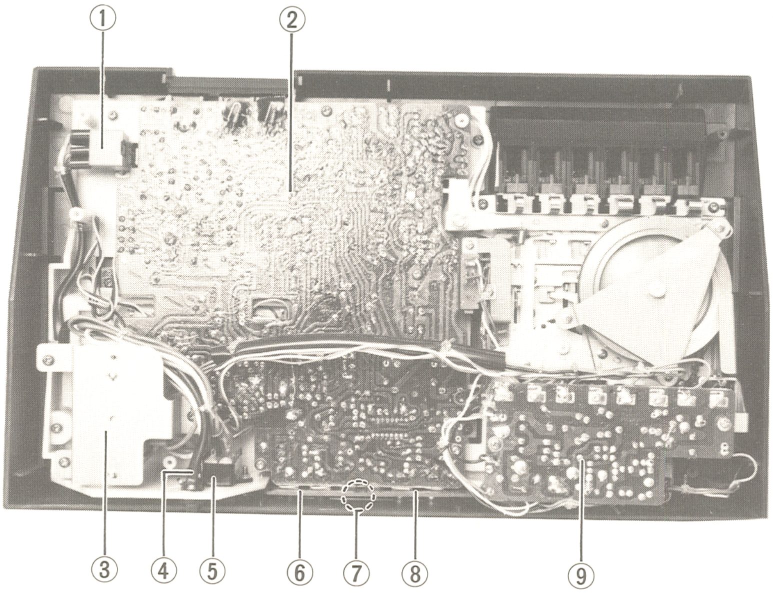

20
21
22
PHONES
MIC

Rear view

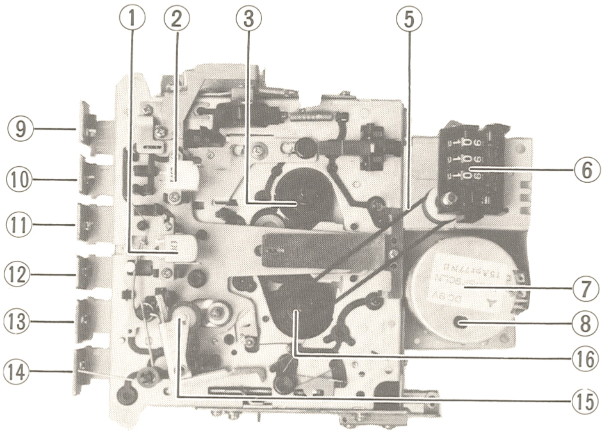

28
R
L
R
L
LINE OUT
REC/PB
LINE IN
23
24
25
26
27
29

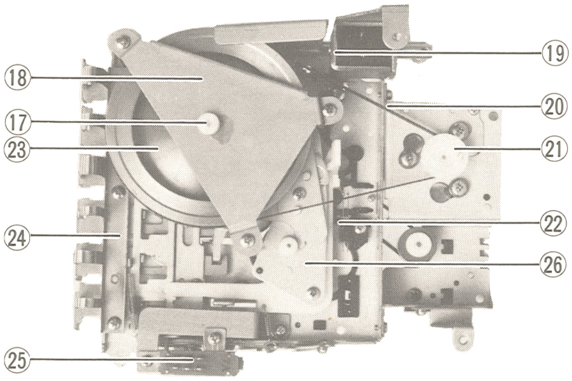
1 LEFT channel level meter (LEFT)
2 RIGHT channel level meter (RIGHT)
3 Left REC level control (LEFT - REC LEVEL)
4 Right REC level control (RIGHT - REC LEVEL)
5 Tape counter (COUNTER)
6 Counter reset button
7 Cassette door
8 Recording indicator (RECORDING)
9 Dolby noise reduction indicator (DOLBY NR)
10 Power switch
11 Dolby noise reduction switch (DOLBY NR)
12 Equalizer switch (EQ)
13 BIAS switch (BIAS)
14 Stop/Eject button (■ STOP/EJECT)
15 REWIND button (◀◀ REWIND)
16 Recording button (REC)
17 Playback button (▶ PLAY/REC)
18 Fast forward button (▶▶FF)
19 PAUSE button (❚❚ PAUSE)
20 Headphone jack (PHONES)
21 Left Microphone jack (MIC-L)
22 Right Microphone jack (MIC-R)
23 Right channel LINE OUT terminal (R-LINE OUT)
24 Left channel LINE OUT terminal (L-LINE OUT)
25 DIN socket (REC/PB)
26 Right channel LINE IN terminal (R-LINE IN)
27 Left channel LINE IN terminal (L-LINE IN)
28 Voltage select switch
29 Power cord

Main Parts Location



1	Power Switch
2	Main P.W. Board Ass'y
3	Power Transformer Bracket
4	Power Cord
5	Voltage Select Switch
6	PIN Input Terminal
7	DIN (REC/PB) Socket
8	PIN Output Terminals
9	Power Supply P.W. Board Ass'y





1	REC/PB Head	VGH0421-001
2	E. Head	VGH0212-101
3	Reel disk ass'y (Supply)	TGP357431-0B
5	Counter belt	VKB3000-001H
6	Tape Counter	TGN294317-0A
7	Motor ass'y	MHI5F9CLN
8	Motor speed adjustment hole	
9	Stop/Eject bar ass'y	TGB361402-0B
10	Rewind bar	VKL4117-001
11	Recording bar	VKL4118-001
12	Play bar ass'y	TGB357413-0C
13	FF bar	VKL4120-001
14	Pause bar	VKL4121-001
15	Pinch roller arm ass'y	TGB361409-0A
16	Reel disk ass'y (take-up)	TGP357431-0A
17	Thrust screw	TEP349420-01
18	Flywheel bracket	VKL4122-001
19	D.C. solenoid	VGP0101-001
20	Capstan belt	VKB3001-001H
21	Motor pulley	VKR4101-00A
22	Leaf switch	V31162-001
23	Flywheel capstan ass'y	VKF3102-00A
24	Button spring	TFP357301-02
25	Switch ass'y	T30483-00C
26	Reel disk bracket ass'y	TGB357305-0A

Main Parts Removing

This cassette which features a compact design and high performance uses miniatures parts which are closely arranged. Use special care when servicing it.

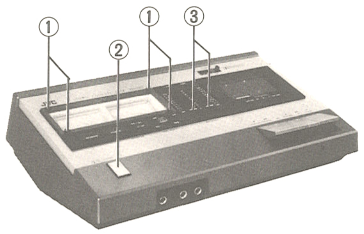
When you remove following parts, we recommend you to keep doing arrow marks.

Cassette lid . . Refer to see page 8.

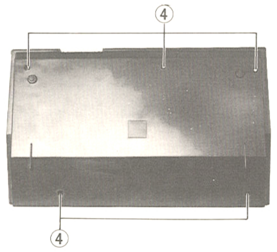
Finder . . . . . Remove 4 special screws ① fastening the finder.

Power knob . . Pull off the power knob ②.
(If you difficult to remove the power knob, Pull the front panel to upper side with the power knob.)

REC level control knobs ③ . . . . . . Pull off.

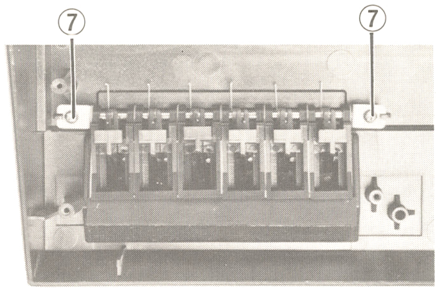


Bottom cover ass'y . . . Remove 5 screws ④ fastening the bottom cover ass'y.

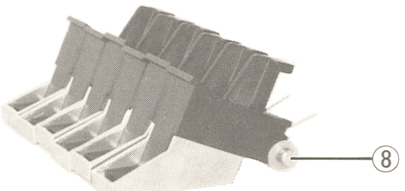


Operation knobs

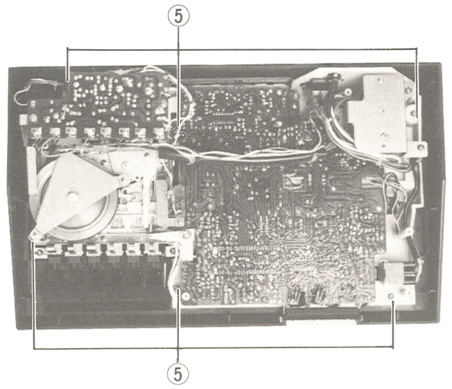
Remove 2 screws ⑦ fastening 2 brackets.



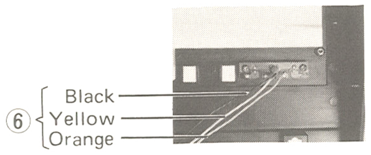
Remove out its shaft ⑧.



Mecha. + Amp ass'y . . . Remove 6 screws ⑤ fastening the its assembly unit.

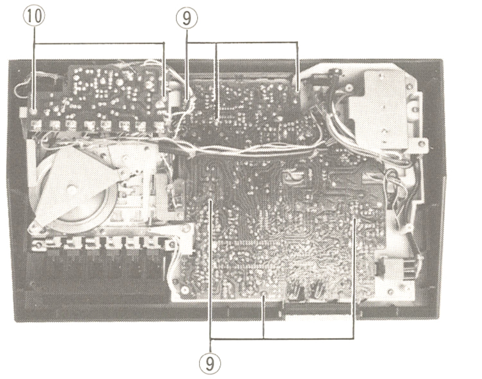


Disconnect 3 wires ⑥ of the indicator P.W. board.



Main P.W. board ass'y

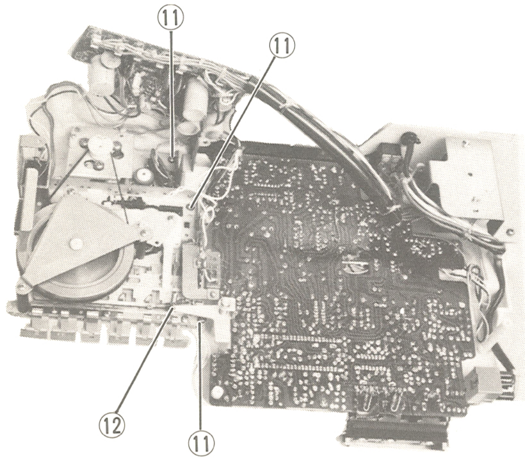
1. Remove 6 screws ⑨ fastening the main P.W. Board and the shield plate.
2. Remove E-ring for the REC lever.
3. Remove 4 screws fastening the recording volumes (as same with 2 springs for earth ground).
4. Pull out Dolby NR, EQ and Bias knobs.
5. Remove 2 screws fastening the jack board.



Power supply P.W. board ass'y . . . Remove 2 screws ⑩.

Mecha ass'y . . .

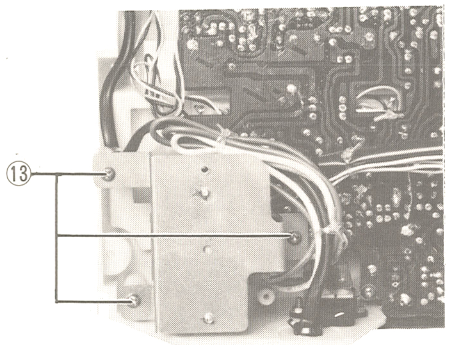
(1) Remove 3 screws ⑪ fastening the mecha ass'y to mould chassis.

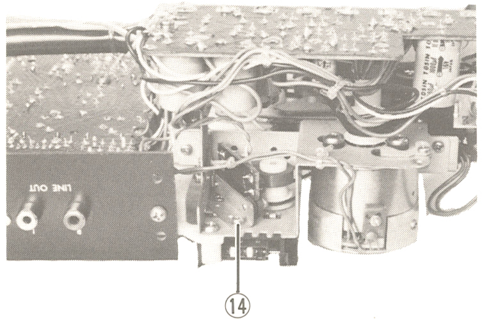


(2) Remove a spring ⑫ on the REC lever.

Power transformer bracket . . . Remove 3 screws ⑬.

Lead switch . . . Remove a screw ⑭.





D.C. solenoid . . . Remove 2 screws ⑮ fastening the solenoid.

Reel disk ass'y (for take-up) . . . Remove the reel stopper ⑯.

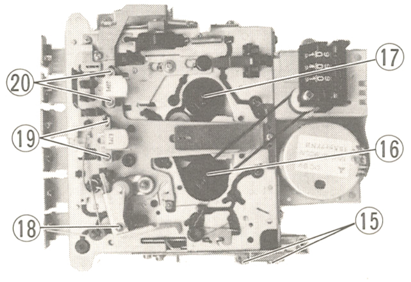
Reel disk ass'y (for supply) . . . Remove the reel stopper ⑰.

Pinch roller arm ass'y . . . Remove the special washer ⑱.

REC/PB head . . . Remove 2 screws ⑲ fastening the REC/PB head.

Erase head . . . Remove 2 screws ⑳ fastening the E head.

Note: After replacement REC/PB head, adjust the head for azimuth.
If necessary, adjust playback sensitivity, REC bias current and REC signal current.



Motor ass'y . . .

(1) Remove a screw (21) fastening the motor cushion stopper.

(2) Remove the capstan belt (22).

(3) Turn right direction to the motor ass'y.

Remarks: Be careful not to stain the capstan belt.

Tape counter . . . Remove a screw (23) fastening the tape counter.

Flywheel capstan ass'y . . .

(1) Remove 3 screws (24) fastening the flywheel bracket.

(2) Remove the capstan belt (22).

(3) Remove a nylon washer to the capstan shaft.

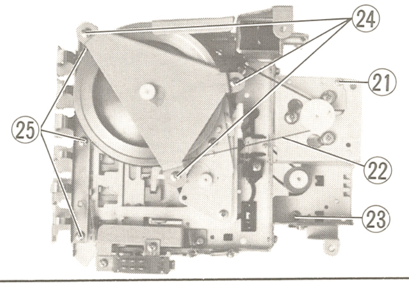
(4) Pull off the flywheel.

Remarks: Be careful not to stain the capstan belt.
When the flywheel is replaced, don't forget it insert a nylon washer to its shaft.

Button spring . . .

Remove 3 screws (25) fastening the button spring.

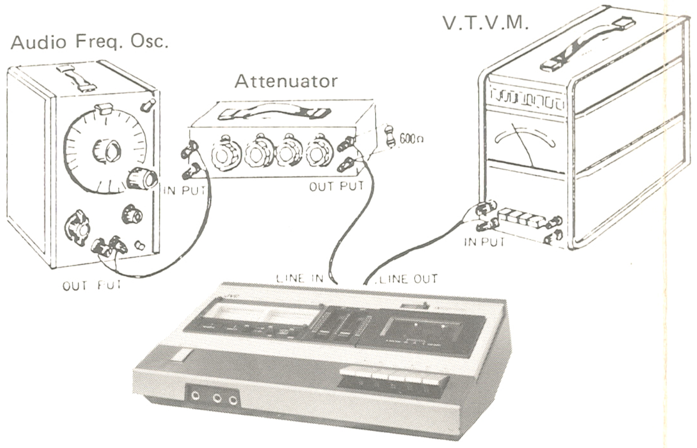
(Remove the button spring after removing the flywheel capstan ass'y.)



Adjustments

Equipment and measuring instruments used for adjustment

1. V.T.V.M. (measuring AC in millivolt)
2. Audio-frequency oscillator
   (range: 50—20 kHz and output 0 dB with impedance 600 Ω)
3. Attenuator
4. Reference tapes for REC/PB
   Maxell UD — normal tape
   TDK SA — chrome tape
5. Reference tapes for playback
   VTT-664 (1 kHz 16 mM)   VTT-658 (10 kHz)
   VTT-666 (400 Hz 22 mM)   VTT-656 (3000 Hz)
   VTT-675N (63 Hz, 1 kHz, 10 kHz, etc.)
6. Resistors
   100 Ω (for measurement of the bias current)
   600 Ω (for attenuator matching)



KD-720

Electrical Adjustment

No.	Item	Procedure	Part	Rating	Remarks
1.	Level meter deflection	1. Set the deck in the record mode. 2. Input 1 kHz signals (about 10 dBs) from LINE IN jacks and adjust Recording level control so that LINE OUT become −6 dBs. 3. Adjust semi-fixed resistors R138 and 238 in this condition it obtain zero VU meter reading.	(Main amp C. board VMW1501-001A) R138, 238		The angle of meter deflection has been factory-adjusted, but should be adjusted when parts are replaced. When adjust the level meter, don't use a headphone.
2.	Playback sensitivity	1. Set equalizer switch at normal and playback reference tape VTT-664. Adjust semi-fixed resistors R118(L) and R218(R) so that LINE OUT become −6 dBs, then level meters indicate zero VU. 2. Playback reference tape VTT-666 and check that the VU meter indicate CAL.	(Main amp C. board R118, 218)	−6 dBs zone of CAL mark	1. Adjust playback sensitivity when heads are replaced. 2. Make this adjustment after making sure level meter deflection angle is correct.
3.	Bias current	1. Insert a 100 Ω resistor into the ground side wiring of the head and connect the V.T.V.M. across the resistor, and set the BIAS SW at chrome or normal. Set the deck in record mode. Input 1 kHz signals to LINE IN jacks and adjust the recording level control so that LINE OUT become −26 dBs. First adjust for chrome tape, then for normal tape. 2. After the deck correct the head wires, input the standard level of 1 kHz signals to use reference tape, and measure REC/PB frequency response at 10 kHz. 3. Adjust semi-fixed resistors R153, 253 (chrome), R152, 252 (normal) so that the 10 kHz frequency response does become ± 1 dB. Repeat the recording and playback so that 10 kHz signals become correct frequency response. Level over at 10 kHz compared with 1 kHz — bias current less Level less at 10 kHz compared with 1 kHz — bias current over	chrome R153, 253 normal R152, 252	chrome 60 mV normal 40 mV	1. Adjust bias current when heads or other parts are replaced. 2. Use the high class V.T.V.M. for high frequency response. 3. After the bias current adjustment, check the frequency response at 10 kHz signals.
4.	Recording signal current	1. Set the deck in the record mode. 2. Input the 1 kHz signals to LINE IN jacks and adjust the recording level control so that LINE OUT become −6 dBs recording in such a way. 3. Adjust the semi-fixed resistors R142, 242 so that LINE OUT become −6 dBs.	(Main amp C. board) R142, 242		1. This adjustment is necessary when heads are replaced. 2. Make this adjustment after adjusting steps (1) through (4). 3. Check the frequency response at 10 kHz after this adjustment. 4. Set EQ and BIAS switches according to type of tape used.

Mechanical Adjustment

1. Replacement and adjustment of the head

If either of the record/playback head and the erase head shown low performance because of wear, broken wire or excessive magnetization, it should be replaced.

Part	Screws to be removed
REC/PB head	Ⓐ , Ⓑ
E head	Ⓒ, Ⓓ

REC/PB head

After replacement, adjust the head for azimuth.

1. Insert the cord plug into the LINE OUT terminal (or REC/PB socket), and connect the other end of the cord to a V.T.V.M. (vacuum tube voltmeter).
2. Play the azimuth adjustment test tape (e.g. JVC's VTT-658, 10 kHz).
3. Turn the azimuth screw Ⓑ so that the output will become maximum.
   If the azimuth adjustment test tape is not available, play a music cassette.
   When treble response becomes optimum, set the adjustment screw Ⓑ.
4. After this adjustment, the screw Ⓑ should be locked with a bond.

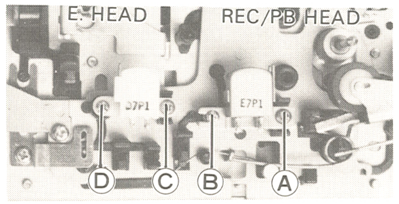
If necessary, adjust playback sensitivity, REC bias current and REC signal current. * PB frequency response

Erasing head

After replacement, adjust the head for height position.

1. Play the test tape (C-120).
2. Turn the adjustment screw Ⓓ so that the test tape move running to no touch the tape guide tip (up or low side).

If it is difficult, use the cassette C-120 that the front side cut by a cutter knife, etc.



2. Adjusting the motor speed

1. Play back reference tape VTT-656 (3000 Hz), and adjust the semi-VR in the motor so that its speed becomes 3000 Hz ± 2% (2970 Hz — 3060 Hz).
2. KD-720 need not to change cycle, whether the commercial frequency in your area is 50 or 60 Hz.

3. Standard torque

Fast forward torque	70 gr-cm or more
Rewinding torque	70 gr-cm or more
Take-up torque	40—70 gr-cm

* P.B. frequency response
Play the reference tape VTT-675N, and measure the P.B. frequency response at 63 Hz and 10 kHz.
Rating:
(Normal 63 Hz .... −1 dB ± 3 dB
10 kHz .... 0 ± 3 dB)

Troubleshooting Guide

[ELECTRICAL CIRCUIT]

1. **Playback tone quality is poor.**
   1. Check the record/playback head for dust.
   2. Check the record/playback head for wear.
      If worn excessively, the loss of treble response will result.
   3. Check wiring for a short-circuit.
      Check each transistor for condition.

2. **Recording tone quality is poor.**
   The playback tone quality of a recorded tape such as the audition tape is good, but the recording by this unit produces poor tone quality. In this case, the unit should be checked in the following manner.
   1. By monitoring a music while recording, check the tone quality.
   2. If found poor, check the wiring of the recording system for a broken wire and short-circuit.
   3. If no irregularity is found, check the recording bias current. Also check the oscillation circuit.

3. **For other failures, check the unit in the same manner as other amplifiers.**

[MECHANICAL SECTION] (wow and flutter)

If wow and flutter increase, check the following points.
If there is defect in revolving parts, the wow and flutter generated will increase proportion to the number of revolutions.
Play a 3000 Hz test tape, and defective part can be detected from the sound.

Section	Trouble	Repair
Capstan and fly-wheel	Capstan shaft has excessive run-out. Flywheel turns heavily. (shaft seisure, thrust play, etc.)	Replace flywheel. Adjust plastic screw with flywheel holder. Clean the capstan shaft and the groove in the flywheel. Apply oil to the metal portion. Replace the capstan assembly.
Pinch roller	Rough rotation (Deformation scratches, or dust) The angular position of the pinch roller is not correct. The pinch roller pressure is not correct.	Replace the pinch roller assembly. Clean the pinch roller or apply oil to the rotary shaft.
Belt	Belt has undue run-out. Belt is dirty or slippery.	Clean the belt or remove the distortion. Replace the belt.
Back tension	Back tension is irregular, or back tension is too strong.	Replace supply disc. Replace back tension spring (under supply disc), or apply silicon grease.
Motor	Motor shaft has undue run-out. Motor pulley is oily and dusty.	Replace motor. Clean motor pulley.
Take-up idler arm	Pulley has deflection. Pulley is stuck.	Replace take-up idler arm.

[MECHANICAL REPAIRS]

Section	Trouble	Repair
Take-up idler arm	Standard take-up torque not available.	Replace take-up idler arm. Replace take-up idler arm pressure spring. Clean or replace capstan belt.
Reel disc and idler	Fast-forward torque not available.	Clean rim of the take-up reel or replace reel disc assembly. Clean or replace fast-forward idler. Clean rim of the supply reel or replace reel disc assembly. Clean rewind idler tire.
Auto-stop mechanism	Auto-stop not operating.	Check slide lever and solenoid iron core for smooth movement. Check if the locking and sliding parts of the operation button cam are well coated with molybdenum.

How to remove the cassette lid

Depress the eject button to open the cassette lid.

Pull out to front the cassette lid while holding its both side edges by each hand.

1. first .... do its right side as Fig. 1.
2. next .... do its left side as Fig. 2.

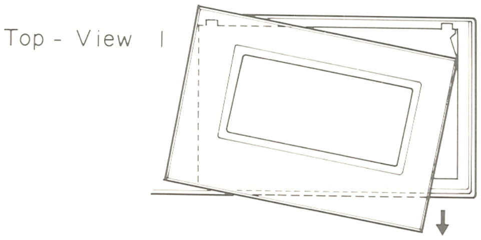


Fig. 1

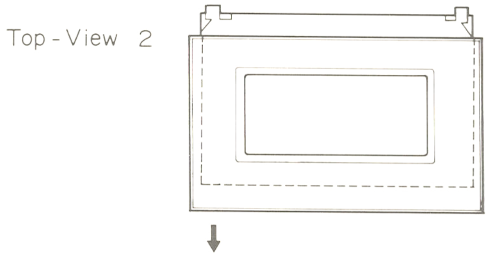


Fig. 2

How to replace the cassette lid

Push the cassette lid in its holder while holding its both side edges by each hand.

1. first .... do its left side as Fig. 3.
   Push its rubber boss to under position of its holder left flap.
2. next .... do its right side as Fig. 4.
   Push its boss in the lever bracket.

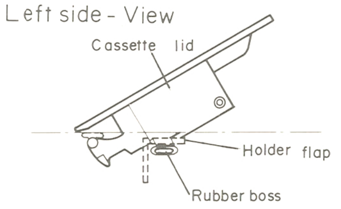

Left side - View
Cassette lid
Holder flap
Rubber boss

Fig. 3

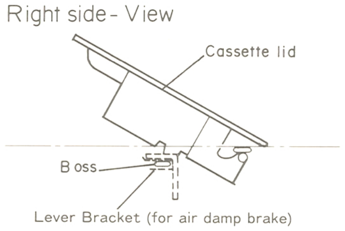
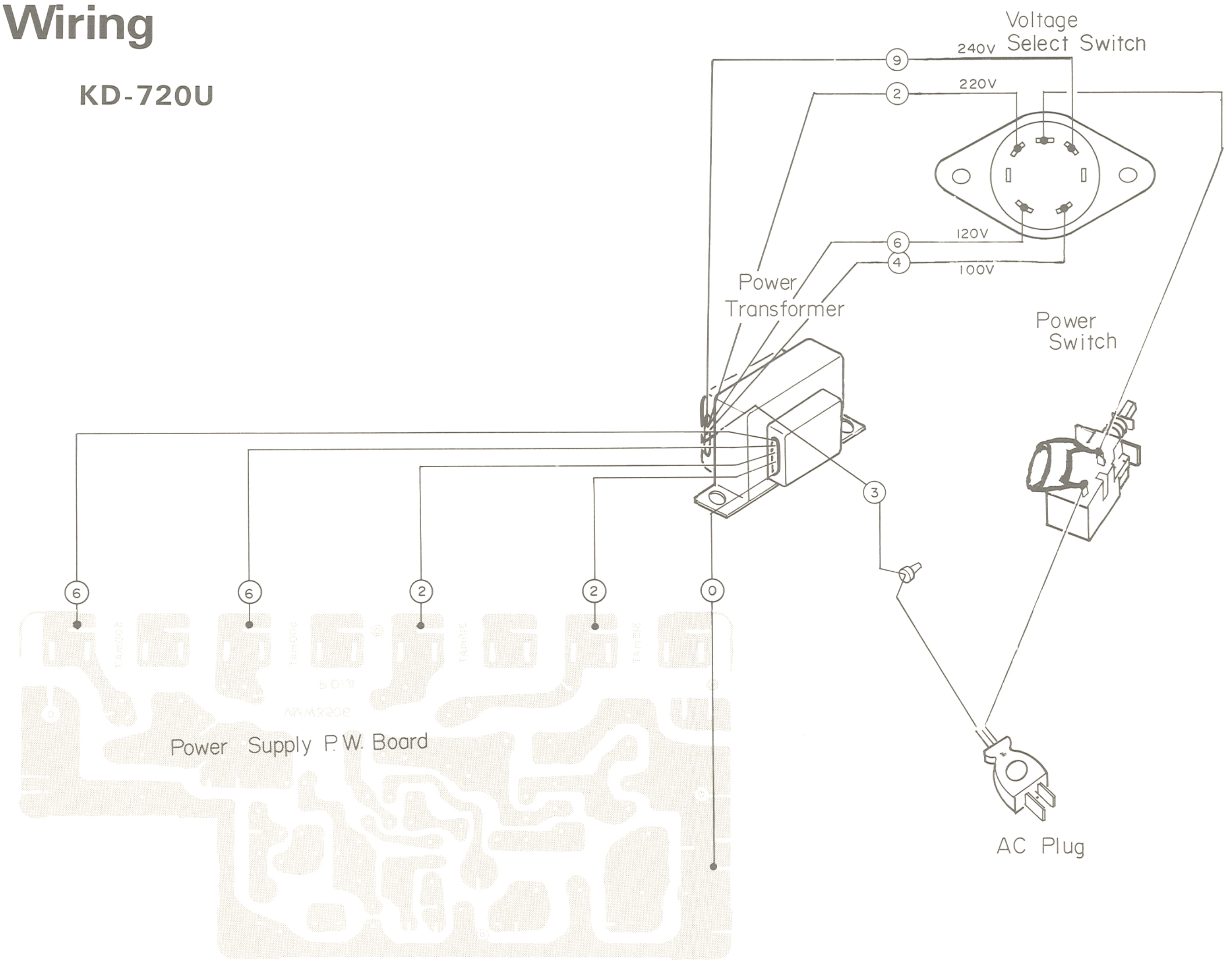

Right side - View
Cassette lid
Boss
Lever Bracket (for air damp brake)

Fig. 4

Wiring

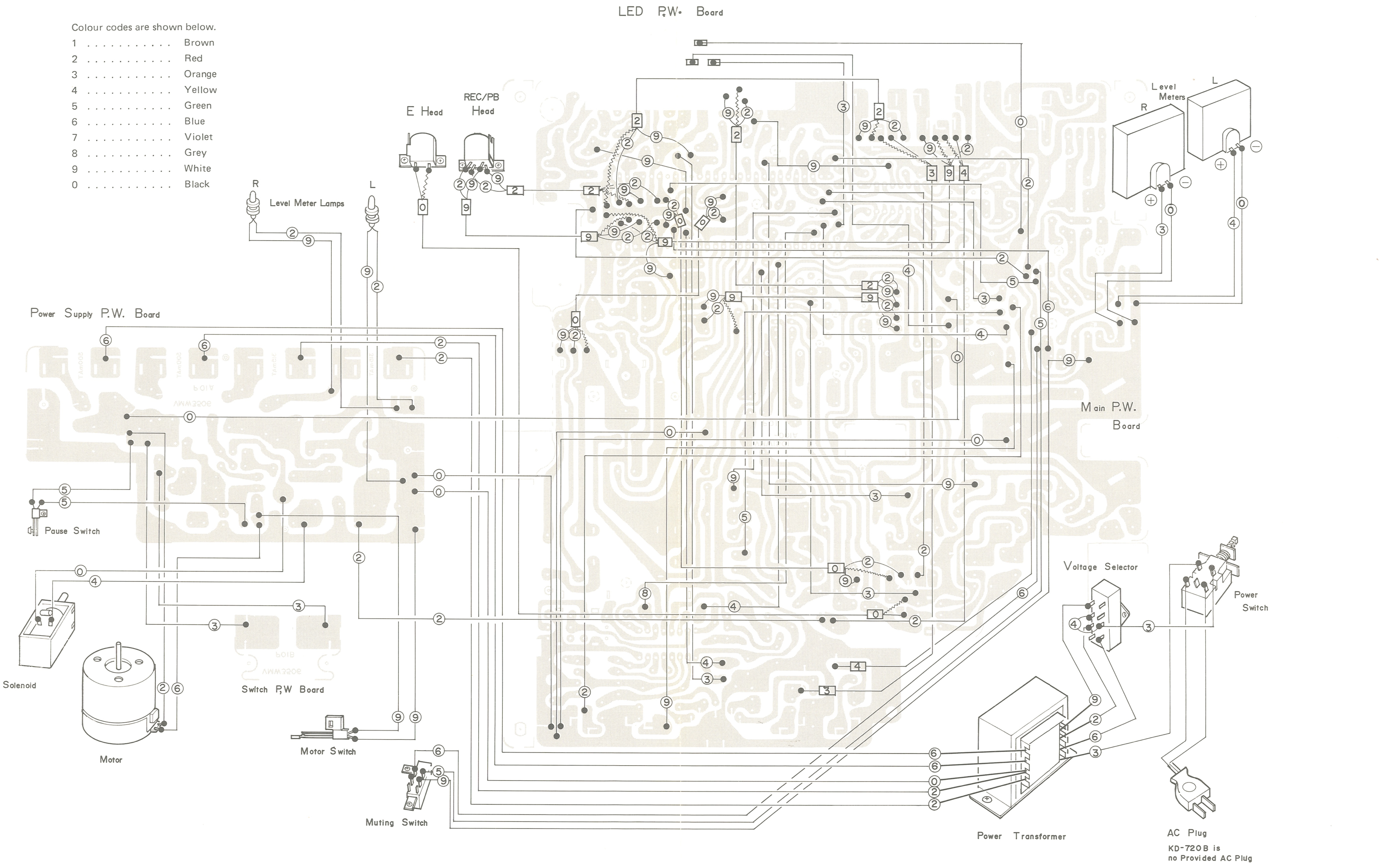
KD-720U


Voltage Select Switch
⑨ 240V
② 220V
⑥ 120V
④ 100V
Power Transformer
Power Switch
③
AC Plug
⑥
⑥
②
②
⓪
Power Supply P.W. Board

KD-720 A/B/E

Colour codes are shown below.

1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Grey
9	White
0	Black

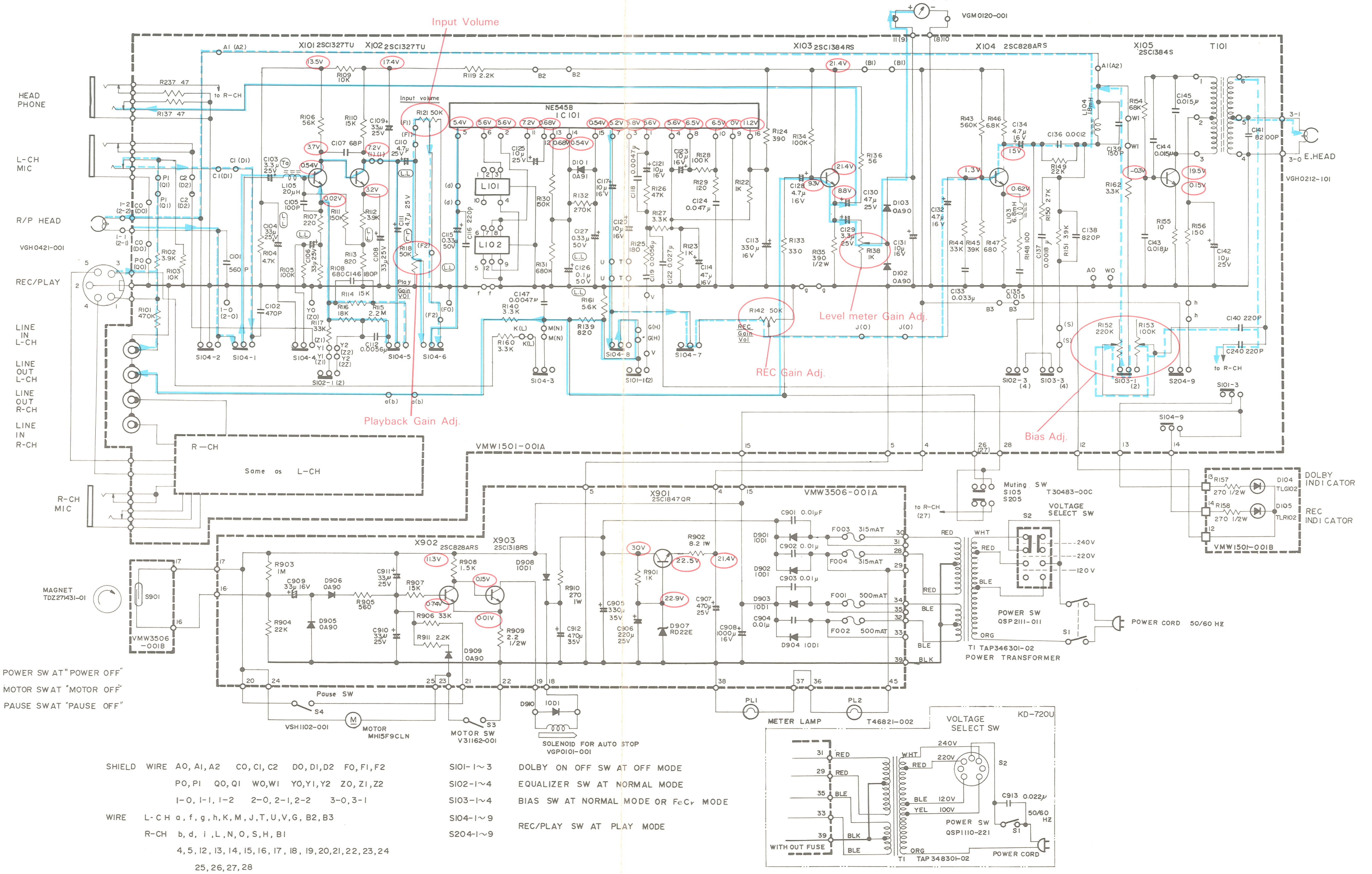

LED P.W. Board
E Head
REC/PB Head
R
L
Level Meter Lamps
Level Meters
R
L
Power Supply P.W. Board
Main P.W. Board
Pause Switch
Solenoid
Motor
Switch P.W Board
Motor Switch
Muting Switch
Power Transformer
Voltage Selector
Power Switch
AC Plug

KD-720B is no Provided AC Plug

Standard Schematic Diagram of KD-720

All voltages are measured by DC V.T.V.M. at playback mode, without input signal unless otherwise specified.
( ) voltages; at recording mode

When you measure the voltage by a tester, we recommend you to use 20 kΩ/V impedance tester.
Blue Lines show the playback signal and the recording signal.
(Sub Line is shown only at recording signal.)


Input Volume
LEVEL METER
VGM0120-001
X101 2SC1327TU
X102 2SC1327TU
X103 2SC1384RS
X104 2SC828ARS
X105 2SC1384S
T101
NE545B IC101
L101
L102
HEAD PHONE
L-CH MIC
R/P HEAD
VGH0421-001
REC/PLAY
LINE IN L-CH
LINE OUT L-CH
LINE OUT R-CH
LINE IN R-CH
R-CH MIC
E.HEAD
VGH0212-101
Playback Gain Adj.
REC Gain Adj.
Level meter Gain Adj.
Bias Adj.
REC Gain Vol
Play Gain Vol
R-CH
Same as L-CH
VMW1501-001A
VMW3506-001A
VMW3506-001B
VMW1501-001B
X901 2SC1847QR
X902 2SC828ARS
X903 2SC1318RS
MAGNET TDZ271431-01
S901
DOLBY INDICATOR
REC INDICATOR
D104 TLG102
D105 TLR102
Muting SW S105 S205
T30483-00C
VOLTAGE SELECT SW
S2
POWER SW QSP2111-011
POWER CORD 50/60 Hz
T1 TAP34630I-02
POWER TRANSFORMER
F003 315mAT
F004 315mAT
F001 500mAT
F002 500mAT
Pause SW
S4
VSH1102-001
MOTOR MHI5F9CLN
MOTOR SW V31162-001
S3
D910 1OD1
SOLENOID FOR AUTO STOP VGP0101-001
PL1
PL2
METER LAMP T46821-002
KD-720U
VOLTAGE SELECT SW
240V
220V
120V
100V
C913 0.022μ
50/60 HZ
POWER SW QSP1110-221
S1
WITH OUT FUSE
T1 TAP34830I-02
POWER CORD

S1 POWER SW AT "POWER OFF"
S3 MOTOR SW AT "MOTOR OFF"
S4 PAUSE SW AT "PAUSE OFF"

SHIELD WIRE A0, A1, A2 C0, C1, C2 D0, D1, D2 F0, F1, F2
P0, P1 Q0, Q1 W0, W1 Y0, Y1, Y2 Z0, Z1, Z2
1-0, 1-1, 1-2 2-0, 2-1, 2-2 3-0, 3-1

WIRE L-CH a, f, g, h, K, M, J, T, U, V, G, B2, B3
R-CH b, d, i, L, N, O, S, H, B1
4, 5, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
25, 26, 27, 28

S101-1~3	DOLBY ON OFF SW AT OFF MODE
S102-1~4	EQUALIZER SW AT NORMAL MODE
S103-1~4	BIAS SW AT NORMAL MODE OR FeCr MODE
S104-1~9 S204-1~9	REC/PLAY SW AT PLAY MODE

[Variable resistors]

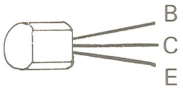
R118, 218	Playback gain adj.	QVP8A0B-054	50 kΩ
R121, 221	Input volume	QVT4C7A-054LM	50 kΩ
R138, 238	Level meter gain adj.	QVP8A0B-013	1 kΩ
R142, 242	REC gain adj.	QVP8A0B-054	50 kΩ
R152	Left bias adj.(normal)	QVP4A0B-224	220 kΩ
R153	Left bias adj.(chrome)	QVP4A0B-104	100 kΩ
R252	Right bias adj.(normal)	QVP4A0B-224	220 kΩ
R253	Right bias adj.(chrome)	QVP4A0B-104	100 kΩ

[Switches]

S101, 201	Lever switch	QSL4210-102
S102, 202, 103, 203	Lever switch	QSL4210-101
	Slide switch	QSS9201-001A
	Slide switch	QSS2325-006
	Push switch (for power)	QSP2111-011BS ... B
	Leaf switch (for motor)	V31162-001
	Slide switch (for muting)	T30483-00C
	Leaf switch (for pause)	VSH1102-001
S901	Lead switch (for auto stop)	TDS271409-01

[Transistors] (Silicon TR)

X101, 201, 201, 202	2SC1327TU	
X103, 203, 105	2SC1384RS	Main P.W. board ass'y
X104, 204	2SC828ARS	
X901	2SC1847QR	
X902	2SC828ARS	Power supply P.W. board ass'y
X903	2SC1318RS	

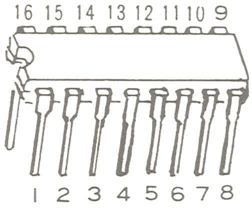


Base
Collector
Emitter

Transistor

[Integrated Circuit]

IC101, 201	NE545B	for Dolby N.R. circuit



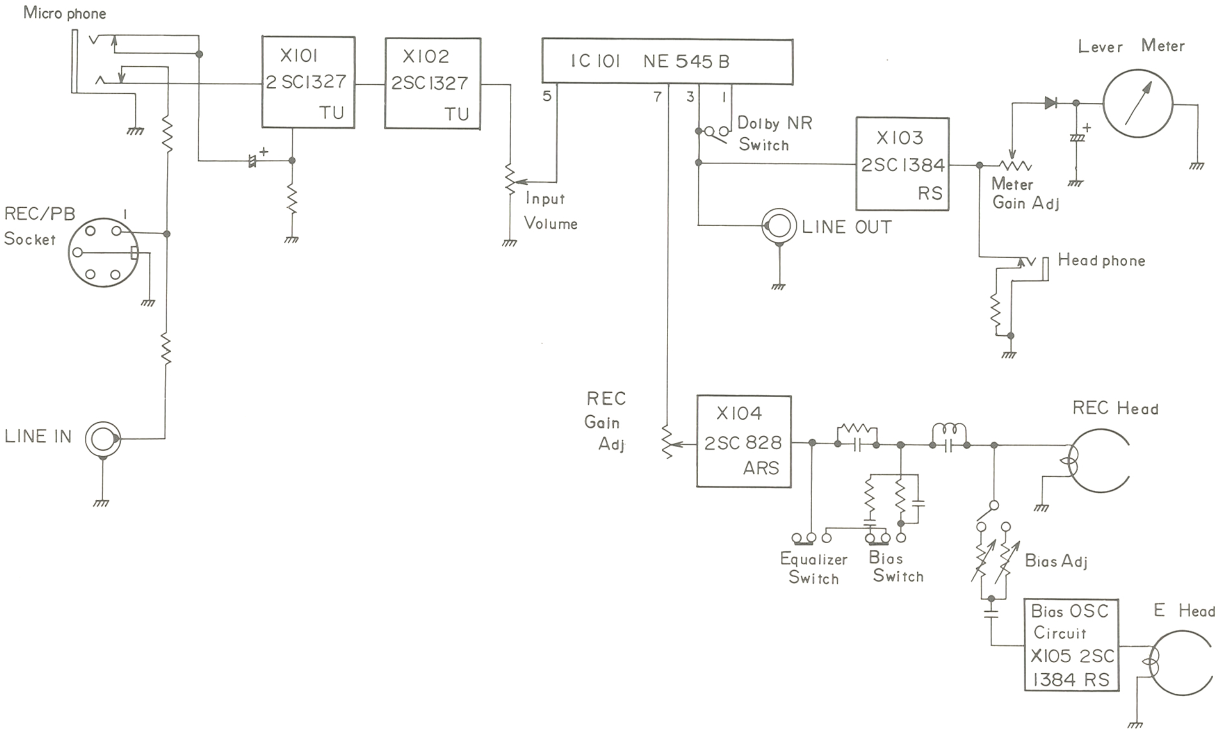
IC NE545B

[Diodes]

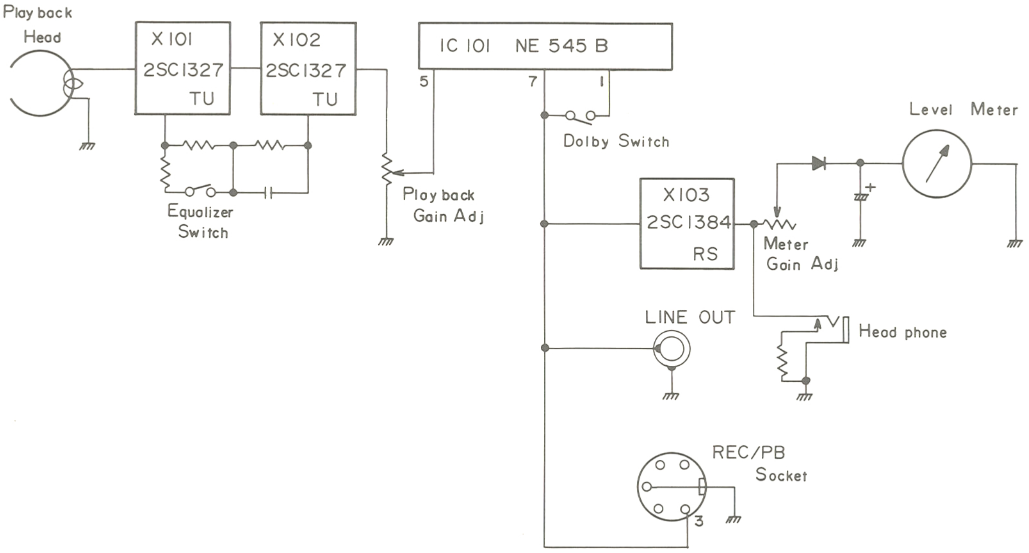
D101, 201	0A91	Ge. Diode	
D102, 202, 103, 203	0A90	Ge. Diode	Main P.W. board ass'y
D907	RD22E	Zener Diode	
D901, 902, 903, 904, 908	T30155-011	Si. Diode	Power supply P.W. board ass'y
D905, 906, 909	0A90	Ge. Diode	
D104	TLG102	for Dolby N.R. indicator	
D105	TLR102	for Rec. indicator	
D910	T30155-001	Si. Diode for Solenoid	

Block Diagram

Recording system


Micro phone
X101
2SC1327
TU
X102
2SC1327
TU
IC 101 NE 545 B
5
7
3
1
Dolby NR
Switch
X103
2SC1384
RS
Lever Meter
Meter
Gain Adj
Head phone
LINE OUT
REC/PB
Socket
1
Input
Volume
LINE IN
REC
Gain
Adj
X104
2SC 828
ARS
REC Head
Equalizer
Switch
Bias
Switch
Bias Adj
Bias OSC
Circuit
X105 2SC
1384 RS
E Head

Playback system


Play back
Head
X101
2SC1327
TU
X102
2SC1327
TU
IC 101 NE 545 B
5
7
1
Dolby Switch
Level Meter
X103
2SC1384
RS
Meter
Gain Adj
Equalizer
Switch
Play back
Gain Adj
LINE OUT
Head phone
REC/PB
Socket
3

Maintenance

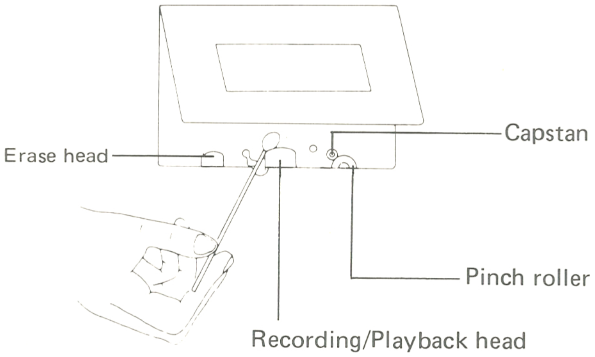
To get long, trouble-free service, maintenance is important. Do not forget cleaning and demagnetizing.

Cleaning

After long use, the heads and tape part-capstan, pinch roller, etc. will become dirty with dust or magnetic particles.
Dirty heads cause imperfect erasing or drop-off of high frequency. A dirty capstan and pinch roller will cause unstable tape speed, leading to increased wow and flutter.
Always keep them clean by the following procedure below.

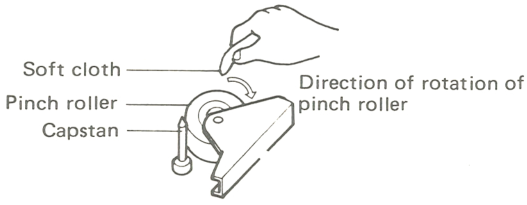
1. Heads

1) Depress the EJECT button to open the cassette door, with the power switch OFF.
2) Use the head cleaning stick provided to wipe the surface where the tape comes into contact with the head.
(It is effective to moisten the cotton with alcohol.)



2. Pinch roller and capstan

1) Press the EJECT button with the POWER switch ON to open the cassette door.
2) Press the PLAY button, while the safety lever is being depressed in order to make the pinch roller will move out and rotate.
3) Apply a soft cloth (soaked in alcohol, it will be more effective) to the rotating pinch roller and capstan.
Be careful not to let the cloth get caught!
*Do not use any cleaner besides alcohol or a specifically prepared tape head cleaning solution.



3. Cabinet

When the cabinet becomes dirty, wipe it with a soft cloth soaked with a neutral cleaning solution of a polishing cloth.
*Do not use thinner or benzine.

Demagnetizing

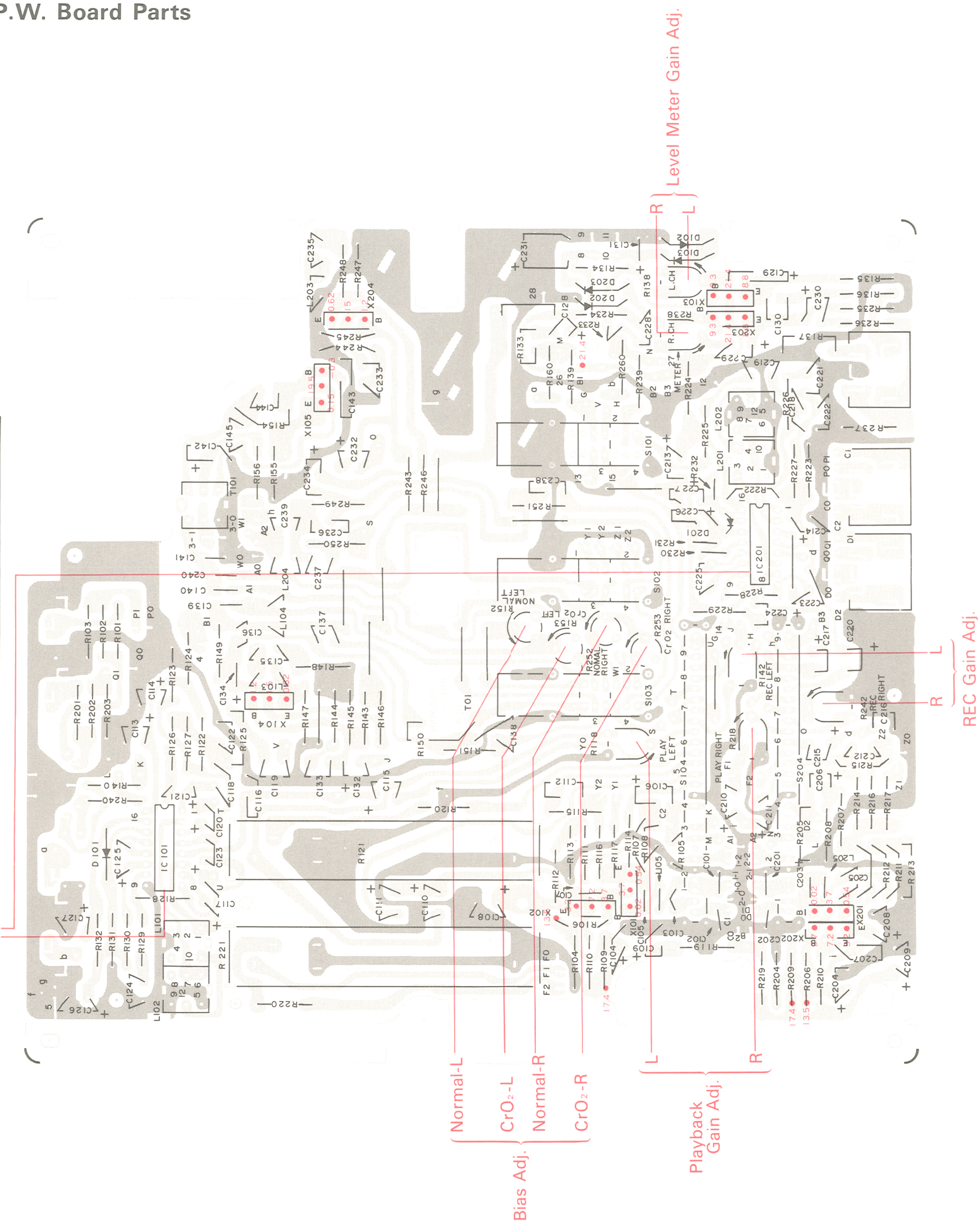
The heads are made from a material resistant to magnetization, but after long use they may become magnetized. A magnet brought into their vicinity can magnetize the heads, causing excess noise. If noise seems to have increased, demagnetize the REC/PB head with a head demagnetizer through the following procedure.

1. Turn the POWER switch OFF.
2. Wrap the tip of the demagnetizer with vinyl tape or soft cloth so as not to damage the head surface. Switch on the demagnetizer and bring it close to the head.
3. Move the tip of the demagnetizer slowly first to the left and right, then up and down in front of the head.
Gradually move it away from the head and switch it off at a distance of more than 30 cm (12").
4. The erase head need not be demagnetized. The capstan shaft and tape guide should be demagnetized in the same way as the record/playback head.
*Do not bring a magnetized metallic object (a screwdriver, for example) near the head as this will increase noise.

Printed Wiring Board Parts

Main P.W. Board Parts

IC101,201 NE545B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	5.6	5.6	5.8	5.6	5.4	5.6	5.2	6.5	0	6.5	7.2	0.68	0.68	0.54	0.54	11.2


Level Meter Gain Adj.
R
L
REC Gain Adj.
L
R
Normal-L
CrO₂-L
Normal-R
CrO₂-R
Bias Adj.
L
R
Playback Gain Adj.

No. 4161

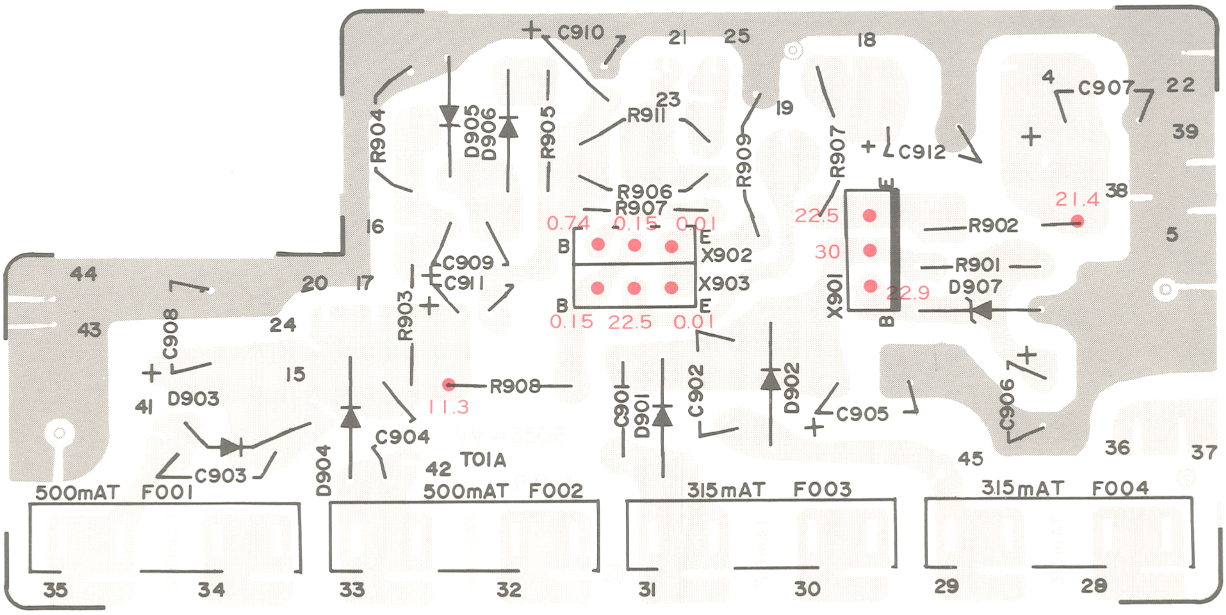
⚠ marked parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.
* marked parts are new ones.
○ marked parts are soldered to pattern side (～#5001).

Main P.W. Board Parts List

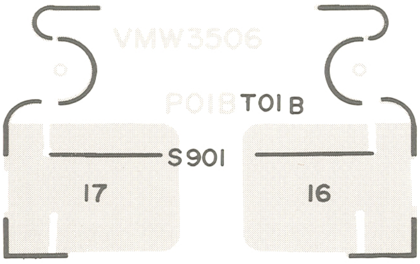
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	*TAJ294306-0B	Pin Jack Ass'y		1 set
R121, 221	*QVT4C7A-054LM	Slide Volume		2
S101, 201	*QSL4210-102	Lever switch		1
S102,202,103,203	*QSL4210-101	"		2
S104, 204	QSS9201-001A	Slide Switch		2
	*VMJ5001-001	Mic/Headphone Jack Ass'y		1 set
	VKL4240-001	Shield Plate		1
	VKL4241-001	Guide Bracket		1
	VKL4166-001	Shield Bracket		1
	VMW1501-001A	P.W. Board	for Main	1
R101, 201	QRD141K-474	C. Resistor	470 kΩ ¼ W	2
R102,202,112,212	" -392	"	3.9 kΩ "	4
R109, 209	" -103	"	10 kΩ "	2
R204, 104	" -472	"	4.7 kΩ "	2
R205	" -104	"	100 kΩ "	1
R128,228,134,234	" -104	"	100 kΩ "	4
R106, 206	" -563	"	56 kΩ "	2
R107, 207	" -221	"	220 Ω "	2
R108, 208	" -681	"	680 kΩ "	2
R109, 209	" -103	"	10 kΩ "	2
R110,210,114,214	" -153	"	15 kΩ "	4
R111, 211, 130	" -154	"	150 kΩ "	3
R113, 213	" -821	"	820 Ω "	2
R115, 215	" -155	"	1.5 MΩ "	2
R116, 216	" -183	"	18 kΩ "	2
R117, 217	" -333	"	33 kΩ "	2
R119,219	" -222	"	2.2 kΩ "	2
R122,222,123,223	" -102	"	1 kΩ "	4
R124, 224	" -391	"	390 Ω "	2
R125, 225	" -181	"	180 Ω "	2
R126, 226	" -473	"	47 kΩ "	2
R127,227,160,260	" -332	"	3.3 kΩ "	4
R129, 229	" -121	"	120 Ω "	2
R131	" -684	"	680 kΩ "	1
R132	" -274	"	270 kΩ "	1
R140, 240	" -332	"	3.3 kΩ "	2
R135, 235	QRD121K-391	"	390 Ω ½ W	2
R136, 236	QRD141K-560	"	56 Ω ¼ W	2
R137, 237	" -470	"	47 Ω "	2
R139, 239	" -821	"	820 Ω "	2
R143, 243	" -564	"	560 kΩ "	2
R144, 244	" -333	"	33 kΩ "	2
R145, 245	" -393	"	39 kΩ "	2
R146, 246	" -682	"	6.8 kΩ "	2
R147, 247	" -681	"	680 Ω "	2
R148, 248	" -101	"	100 Ω "	2
R149, 249	" -223	"	22 kΩ "	2
R150, 250	" -273	"	27 kΩ "	2
R151, 251	" -393	"	39 kΩ "	2
R105	" -104	"	100 kΩ "	1
R106	" -563	"	56 kΩ " ⚠	1
R231	" -684	"	680 kΩ "	1
R230	" -154	"	150 kΩ "	1
R232	" -274	"	270 kΩ "	1
R133, 233	" -331	"	330 Ω "	2
R103, 203	" -103	"	10 kΩ " ○	2
R156	QRD146K-151	"	150 Ω " ⚠	1
R154	QRD141K-683	"	68 kΩ	1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
R155	QRD146K-100	C. Resistor	10 Ω ¼ W ⚠	1
R118,218,142,242	QVP8A0B-054	V. Resistor	50 kΩ	4
R138, 238	″ -013	″	1 kΩ	2
R152, 252	QVP4A0B-224	″	220 kΩ	2
R153, 253	″ -104	″	100 kΩ	2
R161, 261	QRD143K-562	C. Resistor	5.6 kΩ ¼ W ○	2
R162, 262	QRD143K-332	″	3.3 Ω ″ ○	2
C101, 201	QCS11HK-561	Fixed Ceramic Capacitor	560 pF	2
C105, 205	″ -101	″	100 pF	2
C107, 207	″ -680	″	68 pF	2
C116, 216	″ -221	″	220 pF	2
C138, 238	QCY41HK-821	″	820 pF	2
C139, 239	QCS11HK-151	″	150 pF	2
C140, 240	QCY12HK-221	″	220 pF	2
C102, 202	QCY41HK-471	″	470 pF	2
C112,212,119,219	QFM41HJ-562	Mylar Capacitor	0.0056 μF 50 V	4
C118, 218	QFM41HJ-472	″	0.0047 μF ″	2
C122, 222	QFM41HJ-273	″	0.027 μF ″	2
C124, 224	QFM41HJ-473	″	0.047 μF ″	2
C133, 233	QFM41HJ-333	″	0.033 μF ″	2
C135, 235	QFM41HJ-153	″	0.015 μF ″	2
C136, 236	QFM41HJ-122	″	0.0012 μF ″	2
C137, 237	″ -182	″	0.0018 μF ″	2
C143	QFM41HK-183	″	0.018 μF	1
C145, 144	OFZ0001-153	Poly. P. Capacitor	0.015 μF	2
C103, 203	QEE41EM-335	E. Capacitor (Tantal)	3.3 μF 25 V	2
C104,204,106,206, 108,208	QEB41EM-336	E. Capacitor	33 μF ″	6
C109, 209	QEW41EA-336	″	33 μF ″	2
C110,210,111,211	QEW41EM-475	″	4.7 μF ″	4
C113, 213	QEW41CA-337	″	330 μF 16 V	2
C114,214,130,230	″ -476	″	47 μF ″	4
C115, 215	QEB41EM-334	″	0.33 μF 25 V	2
C117,217,120,220, 131,231	QEW41CA-106	″	10 V 16 V	6
C121, 221	QEB41EM-106	″	10 μF 25 V	2
C123,223,125,225	QEW41CA-106	″	10 μF 16 V	4
C126, 226	QEB41EM-104	″	0.1 μF 25 V	2
C127, 227	″ -334	″	0.33 μF ″	2
C128,228,132,232, 134,234	QEW41CA-475	″	4.7 μF 16 V	6
C129, 229	″ -335	″	3.3 μF ″	2
C142	QEW41EA-106	″	10 μF 25 V	1
C141	QFZ0001-822	Poly. P. Capacitor	0.0082 μF	1
C146, 246	QCS11HK-181	F. Ceramic Capacitor	180 pF ○	2
C147, 247	QFM41HK-472	Mylar Capacitor	0.0047 μF ○	2
L102, 202	*VQZ0001-001	Dolby Filter		2
L101, 201	*VQZ0002-001	″		2
L103,203	TAC000324-02	Inductor	0.8 mH	2
L104, 204	TAC000324-01	″	18 mH	2
L105, 205	TAC000493-01	″	20 H	2
T101	TAB345518-01	OSC Coil		1
X101,201,102,202	2SC1327TU	Si. Transistor		4
X103, 203,	2SC1384RS	″		2
X104, 204	2SC828ARS	″		2
X105	2SC1384S	Si. Transistor		1
IC101, 201	NE545B	Integrated Circuit		2
D101, 201	0A91	Ge. Diode		2
D102,202,103,203	0A90	″		4
	V44691-001	Wire Clamp		2
	QWY123-022	Bus Wire		16

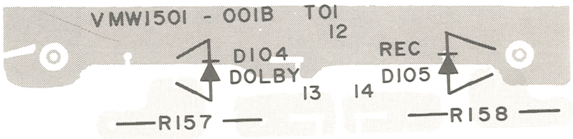
Power Supply P.W. Board Parts


C910
21
25
18
4
C907
22
39
23
R911
19
R904
D905
D906
R905
R909
R907
C912
R906
R907
38
21.4
5
16
0.74
0.15
0.01
B
E
X902
22.5
30
R902
R901
D907
44
20
17
C909
C911
X903
X901
22.9
B
E
B
0.15
22.5
0.01
43
C908
24
R903
15
41
D903
R908
11.3
C901
D901
C902
D902
C905
C906
C904
C903
D904
42
T01A
45
36
37
500mAT
F001
500mAT
F002
315mAT
F003
315mAT
F004
35
34
33
32
31
30
29
28

Switch P.W. Board Parts


VMW3506
P01B
T01B
S901
17
16

L.E.D. P.W. Board Parts


VMW1501 - 001B
T01
12
D104
DOLBY
REC
D105
13
14
R157
R158

Power Supply P.W. board Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	VMW3506-001A	P. W. Board	for Power Supply	1
R903	QRD142K-105	C. Resistor	1 MΩ ¼ W	1
R904	″ -223	″	22 kΩ ″	1
R905	″ -561	″	560 Ω ″	1
R906	″ -333	″	33 kΩ ″	1
R907	″ -153	″	15 kΩ ″	1
R908	″ -152	″	1.5 kΩ ″	1
R911	″ -222	″	2.2 kΩ ″	1
R901	QRD141K-102	″	1 kΩ ″	1
R909	QRD121K-2R2	″	2.2 Ω ½ W	1
R910	QRG016J -271	O.M.F. Resistor	270 Ω ⚠	1
R902	QRX016J-8R2	OMF Resistor	8.2 Ω ⚠	1
R912	QRD143K-473	C. Resistor	47 kΩ ¼ W	1
	TAR000488-01	Heat Sink	for X901	1
X901	2SC1847QR	Si Transistor		1
X902	2SC828ARS	″		1
X903	2SC1318QR	″		1
D907	RD22E	Zener Diode		1
D908	T30155-001	Diode		1
D901,902,903,904	″	Si Diode		4
D905, 906, 909	0A90	Ge. Diode	D909=○	3
C901,902,903,904	QCF12HP-103	Fixed Ceramic Capacitor	0.01 µF	4
C905	QEW41VA-337	E. Capacitor	330 µF 35 V	1
C906	QEW41EA-227	″	220 µF 25 V	1
C907	″ -477N	″	470 µF ″	1
C908	QEW41CA-108	″	1000 µF 16 V	1
C909	QEW41CA-336	″	33 µF ″	1
C910	QEB41EM-336	″	33 µF ″	1
C912	QEW41VA-477N	″	470 µF 25 V	1
C911	QEB41EM-336	″	33 µF ″	1
	TAZ000331-02BS	Fuse Holder	KD-720B	8
	TAZ000331-02	″	KD-720A/E	8
	QMF51A2-R315LBS	Fuse	315 mA Fuse 3, 4 for KD-720B ⚠	2
	QMF51A2-R315	″	315 mA Fuse 3, 4 for KD-720A/E ⚠	2
	QMF51A2-R50LBS	″	500 mA Fuse 1, 2 for KD-720B ⚠	2
	QMF51A2-R50	″	500 mA Fuse 1, 2 for KD-720A/E ⚠	2
	51739-002	Lug		1

L.E.D. P. W. Board Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	VMW1501-001B	P. W. Board	for LED	1
D105	TLR102	LED		1
D104	TLG102	LED		1
	QRD121K-271	C. Resistor	270 ½ W	2
	Y40215-001	Spacer		2
	FG9010-001	Tab		3

Switch P. W. Board Parts List

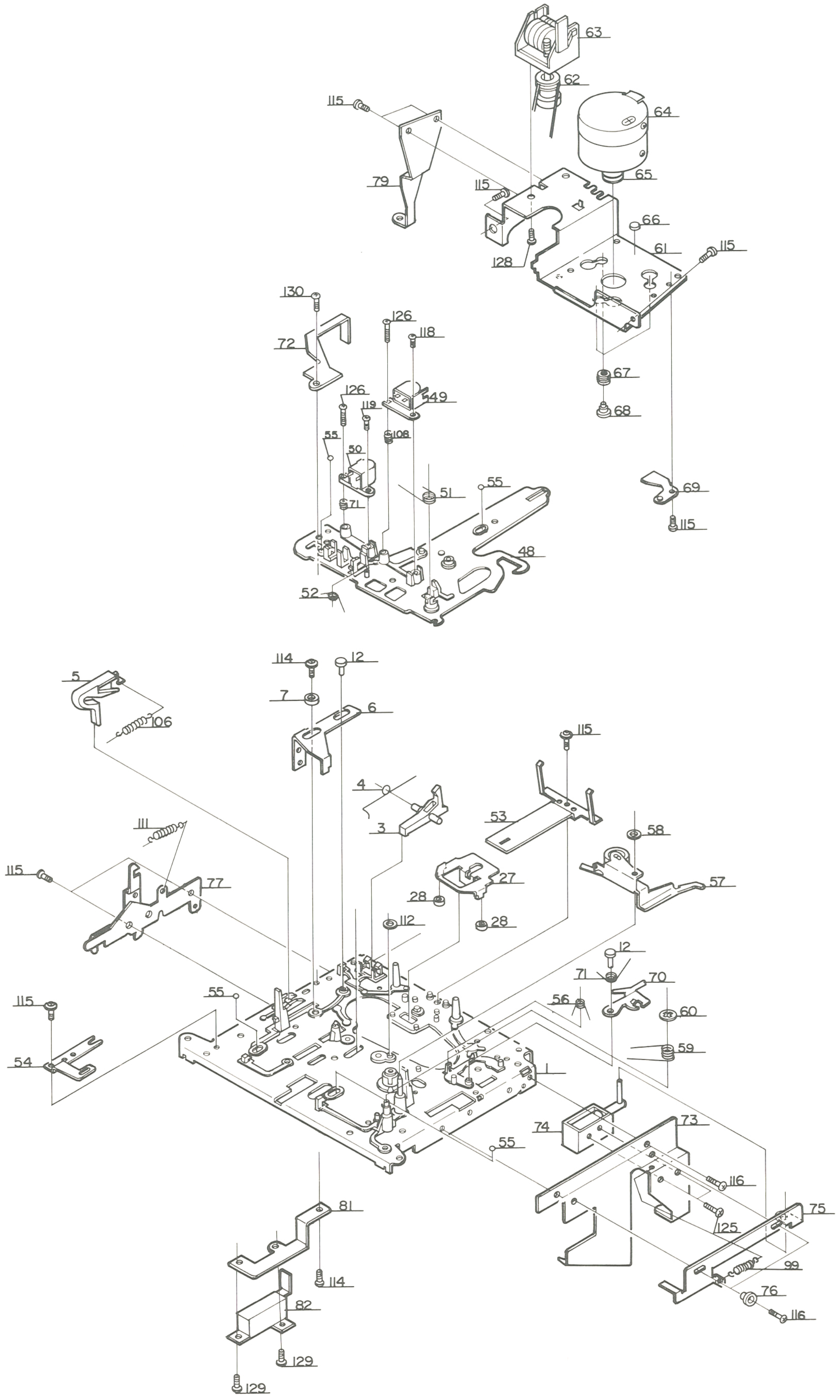
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	VMW3506-001B	P. W. Board	for Switch	1
	TDS271409-01	Lead Switch		1
	TER271414-01	Spacer		1

Mechanical Component Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1	*TGC357101-0B	Chassis Base Ass'y		1
2	*VKF3101-00A	Capstan Metal Ass'y		1
3	TEP357406-01	Rec. Safety Lever		1
4	TFW357471-01	Rec. Safety Lever Spring		1
5	*VKS4102-001	Eject Lever		1
6	TFB357408-03	Rec. Push Bar		1
7	T30302-083	Collar	Rec. Push Bar	1
8	*VKL4115-001	Rec. Lock Lever		1
9	TEP357103-01	Push Bar Case		1
10	TFB357409-01	Cam Guide Bracket		2
11	*TGB361402-0C	Stop Eject Bar Ass'y		1
12	TEP357469-01	Stopper	Rec. Push Bar	1
13	*VKL4117-001	Rew. Bar		1
14	*VKL4118-001	Rec. Bar		1
15	*TGB357413-0C	Play Bar Ass'y		1
16	*VKL4120-001	FF Bar		1
17	*VKL4121-001	Pause Bar		1
18	*TFP357301-02	Button Spring		1
19	*VKL4245-00A	Push Bar Plate		1
21	*TGB357302-0F	Push Bar Cam (1) Ass'y		1
22	*VKS4103-002	Auto Stop Kick Lever		1
23	TEP357421-01	Special Washer		1
24	*VKL3130-001	Push Bar Cam (2)		1
25	TEP361406-01	Pause Bar Guide		1
26	TEP357422-02	Brake Lever		1
27	TFB357423-01	Brake Bar		1
28	TER313493-01	Brake Rubber		2
29	TGB357305-0A	Reel Disk Bracket Ass'y		1
30	TGP357425-0C	Take Up Bar Ass'y		1
31	TFW357430-01	Take Up Bar Spring		1
32	TGP357431-0D	Reel Disk Ass'y	Take Up	1
33	TGP357431-0B	Reel Disk Ass'y	Supply	1
34	TEP357437-01	Reel Stopper		2
35	TGB357438-0A	FF Arm Ass'y		1
36	TFW357446-01	FF Arm Spring		1
37	TGB357447-0A	Rew. Idler Arm Ass'y		1
38	TFB357451-01	Arm Stopper		1
39	TFB357452-02	Rew. Lever		1
40	TEP357421-03	Special Washer		1
41	TFB357453-01	FF Lever		1
42	GPSA2608Z	W. Tap. Screw		1
43	VKH4103-001	Collar		1
44	*VKF3102-00A	Flywheel Capstan Ass'y		1
45	*VKB3001-00H	Belt	Capstan	1
46	*VKL4122-001	Flywheel Bracket		1
47	TEP349420-01	Thrust Screw		1
48	TGB357202-0A	Head Base Ass'y		1
49	VGH0421-001	Rec/PB Head		1
50	VGH0212-101	E. Head		1
51	TFW357467-04	Head Base Spring	Head Base Play Bar	1
52	TFW361408-01	Rec. Lock Lever Spring		1
53	*VKY4107-001	Pack Spring		1
54	TFP357460-01	Head Base Spring Plate		1
55	T41615-004	Steel Ball	Chassis X 2, Head Base X 2	4
56	TFW357470-01	Take Up Spring		1
57	TGB291415-0C	Pinch Roller Arm Ass'y		1
58	REE2500	Special Washer		1
59	TFW357463-02	Pinch Roller Spring		1
60	RDS3000F	CS. Ring		1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
61	*VKL3105-001	Motor Counter Bracket		1
62	*VKB3000-001H	Belt	Counter	1
63	TGN294317-0A	Tape Counter		1
64	MH15F9CLN	Motor Ass'y		1
65	*VKR4101-00A	Motor Pulley		1
66	TER313570-01	Motor Cushion		1
67	TER357465-03	Cushion Rubber	Motor	3
68	TFH345468-01	Motor Screw		3
69	TFB357466-01	Motor Cushion Stopper		1
70	*VKL4228-001	Pause Lock Cam		1
71	TFW361412-01	Pause Lock Cam Spring		1
72	VKL4131-001	Switch Bar		1
73	*VKL4123-001	Solenoid Bracket		1
74	*VGP0101-002	DC Solenoid		1
75	*VKL4124-001	Slide Bar		1
76	T43909-008	Collar	Slide Bar	2
77	VKL4139-00B	Lock Bracket Ass'y		1
79	*VKL4129-001	Amp Bracket		1
80	VSH1102-001	Leaf Switch	for Pause	1
81	VKL4130-001	Switch Bracket	for SW Ass'y	1
82	T30483-00C	Switch Ass'y	for Muting	1
83	V31162-001	Leaf Switch	for Motor	1
84	*VKL4244-001	Select Lever		1
99	*VKW3000-013	Spring		1
100	*VKW3000-014	Spring		1
101	VKW3000-015	Tension Spring	Kick Lever	1
102	T30300-204	"	Brake Lever	1
103	" -205	"	FF Arm - Rew. Arm	1
104	" -206	"	FF Arm - Rew Lever	1
105	" -211	"	FF Lever	1
106	" -201	"	Eject Lever	1
107	T30301-145	Compression Spring	Back Tension	1
108	" -148	"	R/P Head, E. Head	2
109	VKW3000-001	Spring	Cam (1)	1
111	" -017	"	Lock Arm	1
112	Q03093-522	Washer	Oil Cut	1
113	" -627	"	Thrust	1
114	DPSP2606Z	Ass'y Screw	Rec. Push Bar, SW Bracket	2
115	LPSP2604Z	Screw	Pack Spring, Lock Bracket Spring Plate, Stopper Motor Bracket, Amp Bracket,	9
116	LPSP2606Z	"	Bracket, Amp Bracket, Collar	4
118	SBSA2008Z	Tap. Screw	Rec/PB Head	1
119	SBSA2010Z	"	E. Head	1
120	SBSB2608Z	"	Flywheel Bracket x 3, Leaf SW x 1, Disk Bracket x 2	6
121	SBSB2606Z	"	Push Bar Plate, Button Spring	3
122	SDSP2608Z	Screw	Push Bar Case	4
123	SPSP2008Z	"	Pause Bar Guide	1
124	SPSP2604Z	"	Cam Guide Bracket	2
125	SPSP3003Z	"	Solenoid	2
126	SPSX2012Z	"	Rec/PB Head, E Head	2
127	SSSP2004Z	"		3
128	SSSP3006Z	"	Counter	1
129	LPSP2006Z	"	for Switch	2
130	LPSP2603Z	"	for SW Bar	1
131	SDBP2606Z	"	for Leaf SW	1
132	REE2500	"E" ring		1

Mechanical Component Parts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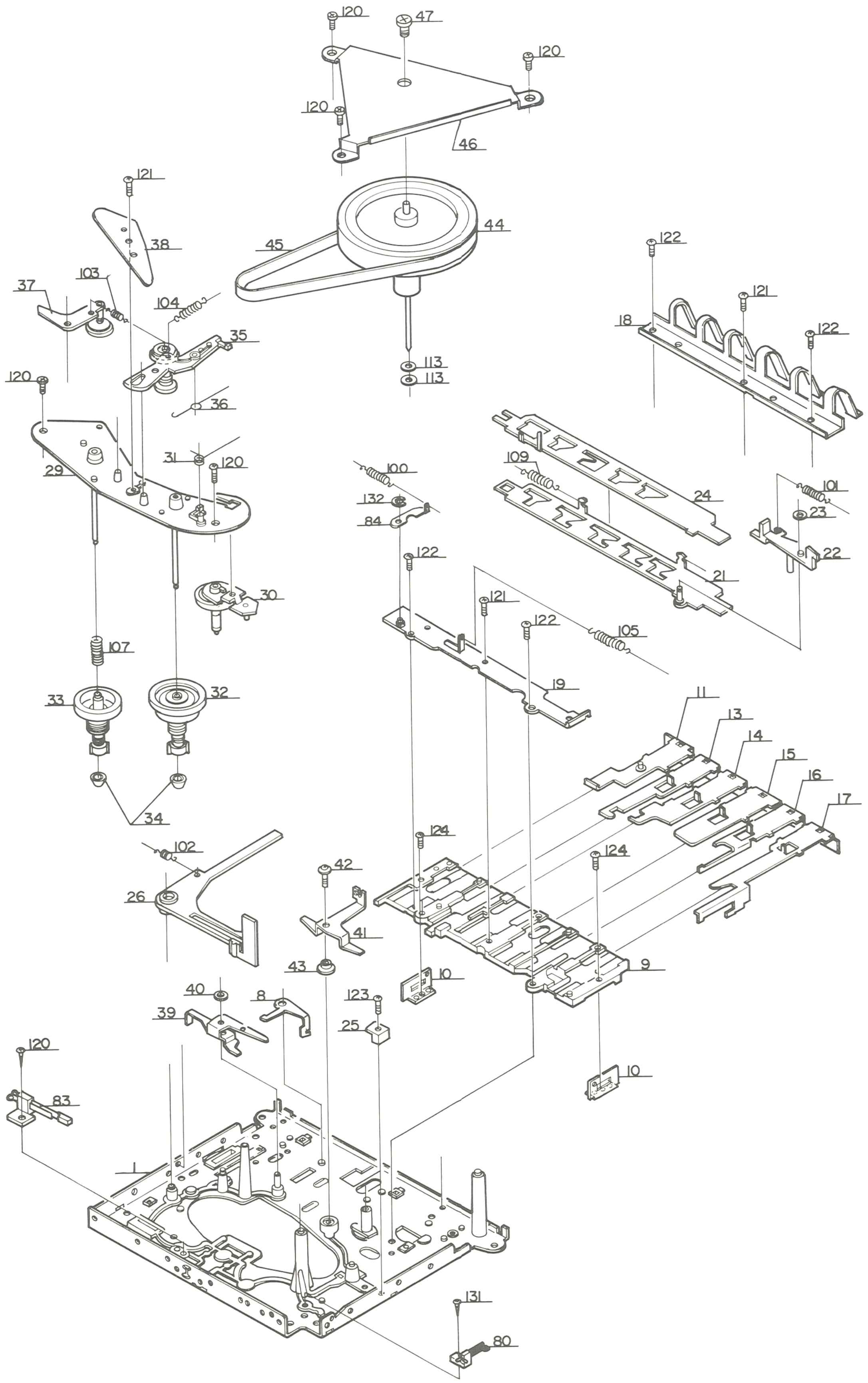
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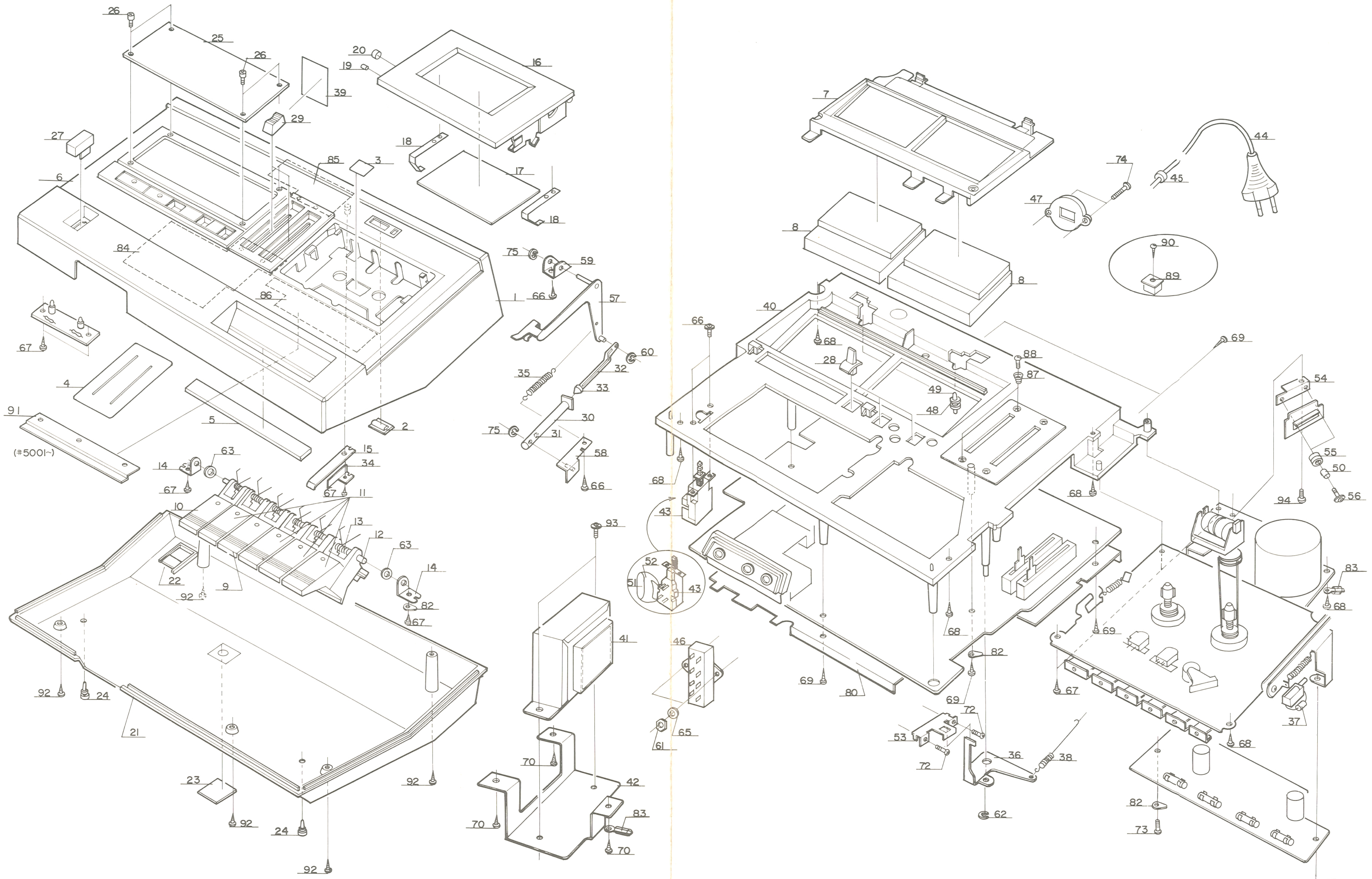
Enclosure Ass'y and Electrical Parts

(Except P.W. Board Parts)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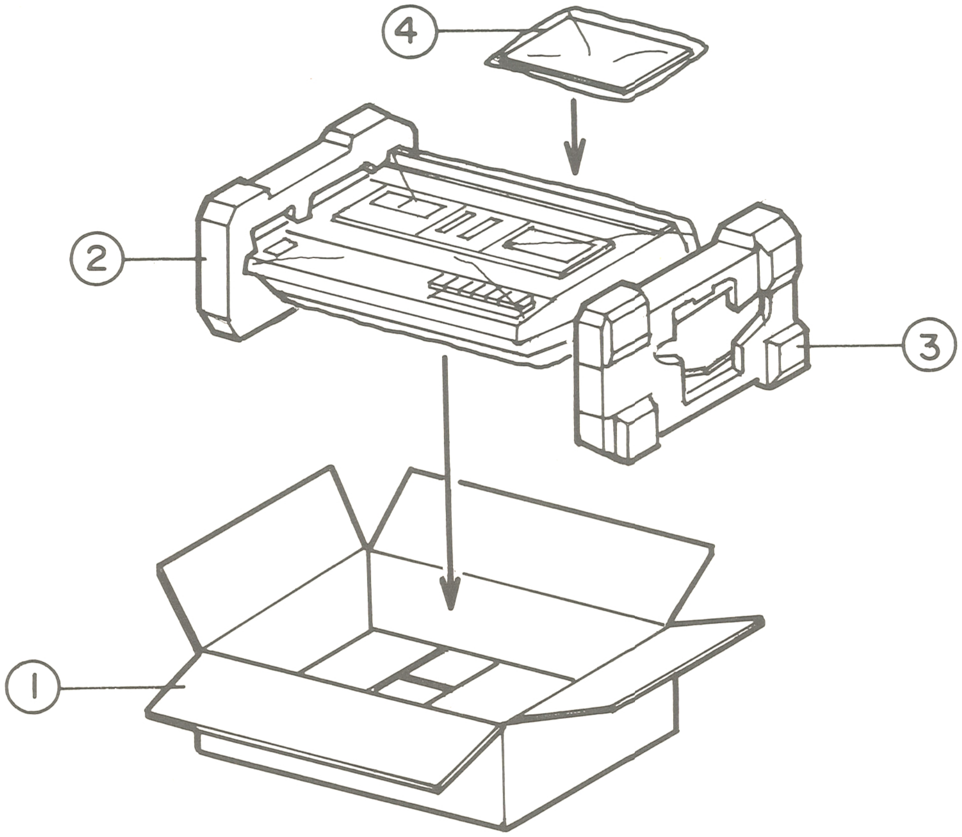
⚠ marked parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Enclosure Ass'y and Electrical Parts List (Except P.W. Board Parts)

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1–6*	ZCKD720-CBF	Front Panel Ass'y		1 set
1–5*	VJC1014-00A	Top Panel Ass'y		1
1*	VJC1015-001	Top Panel		1
2	TJE294401-01	Counter Lens		1
3	V44957-001	Reflection Plate		1
4*	VYTA409-001	Blind		1
5*	VYTR402-001	Button Spacer		1
6*	VJD2112-001	Top Plate		1
7*	VJD2111-001	Meter Escutcheon		1
8*	VGM0120-001	Level Meter		1
9*	VXP3008-00A	Push Button		1
10*	″ -00B	″		1
11*	″ -00C	″		4
12*	VKH4108-001	Shaft		1
13*	VKW4104-002	Spring		6
14*	VKL4135-001	Bracket		2
15*	VKY4109-002	Spring		1
16–20*	VJT3011-00A	Cassette Lid Ass'y		1
16*	VJT2007-001	Cassette Lid		1
17*	VJK4103-001	Lid Finder		1
18	V44206-005	Cassette Spring		2
19	TFH294507-01	Spacer		1
20	V41405-006	Rubber Ring		1
21–23*	VJC1016-00A	Bottom Cover Ass'y		1
21*	VJC1017-001	Bottom Cover		1
22*	VYSR105-001	Spacer		1
23*	VJD4138-001	Plate		1
24	T42479-001	Foot		2
25*	VJK4104-001	Finder	for Meter	1
26	E60919-002	Special Screw		4
27*	VXP4002-001	Switch Knob	for Power	1
28*	VXQ4010-001	″	for Tape SW	3
29*	VXS4008-001	Slide Knob	for Volume	2
30–31*	V44830-00A	Brake Pipe Ass'y		1
30	V44829-001	Brake Pipe		1
31	TEP267522-01	Spacer		1
32	TEP316403-001	Brake Shaft		1
33	TER267508-02	"O" Ring		1
34	VKL4251	Bracket		1
35	VKW3000-012	Tension Spring		1
36*	VKL4132-001	Rec Lever		1
37	T30155-001	Si. Diode		1
38*	VKW4103-001	Rec. Spring		1
39*	VYN2014-003HA	Name Plate	KD-720A	1
*	VYN2014-001HA	″	KD-720B	1
*	VYN2014-002HA	″	KD-720E	1
*	VYN2014-004HA	″	KD-720U	1
40*	VYH1104-001	Mould Chassis		1
41*	TAP346301-02	Power Transformer	KD-720A/E ⚠	1
*	TAP346301-02BS	″	KD-720B ⚠	1
*	TAP348301-02	″	KD-720U	1
42*	VKL4136-001	Trans. Bracket		1
43	QSP2111-011BS	Push Switch	KD-720B for Power ⚠	1
	QSP2111-011	″	KD-720A/E ″ ⚠	1
	QSP1110-221	″	KD-720U ″	

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
44	QMP2500-244	P. Cord w/Plug	KD-720A ⚠	1
	QMP9017-007BS	"	KD-720B ⚠	1
	QMP3900-244	"	KD-720E ⚠	1
	QMP7600-244	"	KD-720U	1
45	QHS3876-252	Strain Relief		1
46	QSS2325-006	Slide Switch	KD-720A/B/E ⚠	1
	QSR0084-001	Voltage Select SW	KD-720U	1
47*	VJD4130-001	SW. Escutcheon	KD-720A/B/E	1
48	TJZ338414-02	Lamp Holder		2
49	T46821-002	Pilot Lamp		2
50	T30302-063	Collar		2
51	FH53AM-223	M. M. Capacitor	KD-720U for Power SW	1
52	T47047-001	Condenser Cap	KD-720U for MM Cap.	1
53*	VKL4133-001	Connection Bracket	for Rec SW	1
54*	VKL4137-001	SW Bracket		1
55	53492-002	Bushing		2
56	DPSP2608Z	Screw	for Lead SW	2
57	VKL4234-00A	Brake Lever Ass'y		1
58	VKL4237-00A	Pipe Bracket Ass'y		1
59	VKL4236-001	Brake Bracket		1
60	REE2500	E Washer		1
61	NTB3000	Nut		2
62	REE4000	"E" Ring	for Rec Lever	1
63	Q03093-407	Washer		11
65	WNS3000N	Washer		2
66	DPSP3008ZS	Screw	for Push SW, Air-damp	4
67	SBSB3008Z	"	Lid + Amp Ass'y, Top Panel + Mecha	10
68	SBSB3010C	"	for Amp Ass'y + Top Panel	6
69	SBSB3010Z	"	for P.W.B. + Mould Chassis B. Lever Ass'y	6
70	SBSB3025Z	"	for Power Trans. Bracket	3
71	SDSA2608Z	"	for Motor SW	1
72	LPSP2006Z	"	for Connection Bracket	2
73	LPSP3008ZS	"	for Power P.W. Board	2
74	LPSP3014ZS	"	for Select SW	2
75	REE3000	"E" Washer		2
76	SDSA3010ZS	Screw	for Spring (VKY4109-001)	1
80	VYTN301-001	Shield Plate	for Main P.W. Board Ass'y	1
81	TAW000504-01	Connector	KD-720U	1
82	51739-002	Lug		3
83	TAW000473-01	Wire Clamp		2
84	VYTN403-001	Shield Plate	for Front Panel	1
85	VYTN404-001	Shield Plate	for Front Panel	1
86	VYTN405-001	Shield Plate	for Front Panel (～ #5001)	1
87	VKW4125-001	Taper Spring		2
88	LPSP3012ZS	Screw		2
89	VYH4006-001	Screw Gromment		2
90	SBSB3018Z	Screw	for Screw Gromment	2
91	VKL4252-001	Bracket	(#5001～)	1
92	SBSB3012Z	Screw	for Top Panel + Bottom Cover	5
93	DPSP3006ZS	Screw	for Power Transformer	2
94	LPSP2606Z	Screw	for SW Bracket	1

Packing



Packing Material List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1–3	VPA3005-00A	Packing Case Ass'y		1 set
1	VPA3005-001	Case		1
2	VPA1117-001	Cushion	Left	1
3	VPH1118-001	Cushion	Right	1
	T6800-00J	Envelope	for Set	1
	AP4056A-036	″	for Power Cord, for Provided Cord	2
4	AP4056A-077	″	for Instruction Book	1

Accessories

Parts No.	Parts Name	Remarks	Q'ty
T30046-00B	PIN Cord	KD-720A/U	2
CN-201	DIN Cord	KD-720B/E	1
T47796-00B	Head Cleaning Stick		2
AP4056A-024	Envelope	for H. C. Stick	1
VNN0004-301	Instruction Book		1
TLT000429-01	Caution Card		1
QZL1002-003BS	Warning Label	KD-720B	1
T46328-003	Caution Label	KD-720B	1
T46328-004	Caution Label	KD-720E	1
BT20015B	Warranty Card	KD-720U	1
BT20013B	Guarantee Certificate	KD-720B	1
E7795-01	EP Mark	KD-720U	1
E04056-001	Conti Plug	KD-720U	1
T46328-01	Caution Card	KD-720U	1
T46207-003	Head Mark		1
TJL000420-01	Label	KD-720B (Made in Japan)	1
TLZ000348-02	Tape Select Chart		1
BT20029	Warranty Card	KD-720A	1

JVC

JVC

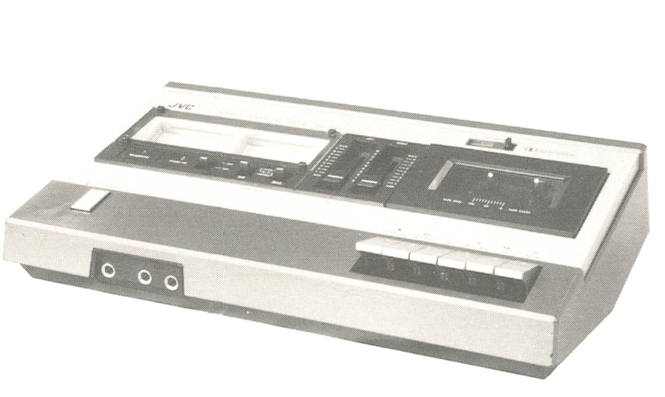
Supplementary

SERVICE MANUAL

MODEL

KD-720A/B/C/E/J/U

STEREO CASSETTE DECK



No. 4161-3
May 1978

This manual is supplementary of KD-720A/B/C/E/J/U service manual (No. 4161) to improve performance and other reasons.

Please add this comparative table to service manual (No. 4161) and give an order to us for the parts concerned to keep them as spare.

KD-720A/B/C/E/J/U (No. 4161)

Page	Line	Original			NEW				
		Ref. No.	Parts No.	Parts Name	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
		(Main P.W. Board Parts)							
15	11	R101, 201	QRD141K-474	C. Resistor	R101, 201	QRD141K-124	C. Resistor	120 kΩ ¼ W #301~ for Min. Input Level	2
	56	R103, 203	QRD141K-103	C. Resistor	R103, 203	QRD141K-682	C. Resistor	6.8 kΩ ¼ W #301~ for Min. Input Level	2
16	29	C115, 215	QEB41EM-334	E. Capacitor	C115, 215	QEB41HM-334M	E. Capacitor	0.33 μF 50 V	2
		(Mechanical Component)							
19	6	6	TFB357408-03	Rec. Push Bar	6	TFB357408-04	Rec. Push Bar		1
	12	12	TEP357469-01	Stopper	12	TEP357469-02	Stopper	Rec. Push Bar	1
	13	13	VKL4117-001	Rew. Bar	13	VKL4117-002	Rew. Bar		1
	18	18	TFP357301-02	Button Spring	18	TFP357301-03	Button Spring	for Crosstalk of Pause Bar	1
	31	31	TFW357430-01	Take-up Bar Spring	31	TFW357430-02	Take-up Bar Spring		1
	34	34	TEP357437-01	Reel Stopper	34	TEP357437-02	Reel Stopper		2
	54	54	TFP357460-01	Head Base Spring Plate	54	TFP357460-03	Head Base Spring Plate		1
	56	56	TFW357470-01	Take-up Spring	56	TFW357470-02	Take-up Spring		1
	58	58	REE2500	Special Washer	58	REE2500	E-ring	(for Literal error)	1
20	29	104	T30300-206	Tension Spring	104	VKW3002-001	Tension Spring	FF Arm – Rew. Lever	1
20	33	107	T30301145	Compression Spring	107	VKW3001-011	Compression Spring	Back Tension	1
	43	118	SBSA2008Z	Tap. Screw	118	SPSB2006Z	Tap. Screw	Rec./PB Head, #5001~	1
	44	119	SBSA2010Z	"	119	SPSB2006Z	"	E. Head, #5001~	1
		(Enclosure Ass'y and Electrical Parts)							
23	2	1–5	VJC1014-00A	Top Panel Ass'y	1–5	VJC1014-00C	Top Panel Ass'y	CrO_2 → SA/CrO_2	1
	3	1	VJC1015-001	Top Panel	1	VJC1015-003	Top Panel		1
	29	25	VJK4104-001	Finder	25	VJK4104-002	Finder	for Meter	1
24	51	93	DPSP3006ZS	Screw	93	LPSP3006ZS	Screw	for Power Transformer	2
		(Accessories)							
26	10		BT20015B	Warranty Card		BT20032	Warranty Card	KD-720U, for PX	1
			E04056-001	Conti. Plug		V04062-001	Siemens Plug	KD-720U	1
						BT20023	Service Procedure	KD-720U, for PX (Addition)	1
						BT20024B	Special Reply Card	KD-720U, for PX (Addition)	1

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